Publication
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Reduction of Carvone

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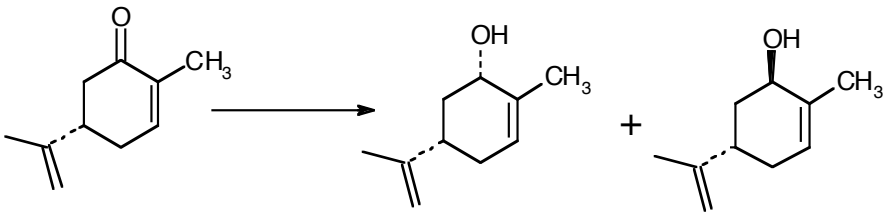

Procedure:

1.0 mL of *d*-carvone was dissolved in 10.0 mL of 6.0 M sulfuric acid in a 50-mL round-bottom flask that was equipped with a condenser, a heat source, and a magnetic stirrer. The reaction mixture was heated under gentle reflux for 35 minutes. The heat source was removed and the mixture cooled in an ice bath. Two 5 mL portions of low boiling petroleum ether were used to extract the product from the reaction mixture. The combined organic phase was washed with 5 mL of 5% aqueous sodium bicarbonate, dried over anhydrous sodium sulfate, and the solvent removed by rotary evaporation. 0.86 grams of a light yellow oil, which smelled herb-like, was obtained after distillation.

b.p. 237-238^{o}C; [α] = 0^{o}; Yield 88 %.

Spectral Data:

^{1}H NMR ($CDCl_3$, 60 MHz)- 1.14 (doublet, 6 H, J = 7.0 Hz), 2.20 (singlet, 3 H), 2.73 (heptet, 1 H, J = 7.0 Hz), 5.9 (broad singlet, 1 H), 6.63 (singlet, 1 H), 6.69 (doublet, 1 H, J = 7.5 Hz), 7.01 (doublet, 1 H, J = 7.5 Hz); ^{13}C NMR ($CDCl_3$, 15 MHz) _ 15, 23, 33, 113, 119, 121, 131, 148, 153; FTIR (neat): 3385, 3020, 2961, 2928, 2869, 1621, 1589, 1523, 1502, 1458, 1421, 1382, 1363, 1302, 1250, 1174, 1117, 1091, 1089, 1067, 1056, 995, 937, 867, 813, 717, 639 cm^{-1}; MS *m/z* 150 (32%), 135 (100%), 115 (15%), 107 (28%), 105 (11%), 91 (15%), 79 (7%), 77 (9%); High resolution MS molecular ion *m/z* 150.1045; UV λ_{max}= 277nm, log ε = 3.26. **(Selected spectra follow.)**